5

10

15

## ELECTROWETTING BATTERY HAVING A NANOSTRUCTURED ELECTRODE SURFACE

A method and apparatus are disclosed wherein a battery comprises an electrode having at least one nanostructured surface. The nanostructured surface is disposed in a way such that an electrolyte fluid of the battery is prevented from contacting the electrode, thus preventing discharge of the battery when the battery is not in use. When a voltage is passed over the nanostructured surface, the electrolyte fluid is caused to penetrate the nanostructured surface and to contact the electrode, thus activating the battery. In one illustrative embodiment, the battery is an integrated part of an electronics package. In another embodiment, the battery is manufactured as a separate device and is then brought into contact with the electronics package. In yet another embodiment, the electronics package and an attached battery are disposed in a projectile that is used as a military targeting device.